36. (New) Apparatus comprising:

a vehicle seat frame;

a plurality of deflectable mounting structures which together bear the entire weight of said frame;

a plurality of vehicle occupant weight sensor assemblies, each of said weight sensor assemblies comprising a strain gauge mounted on a corresponding one of said deflectable mounting structures; and

a vehicle occupant protection device responsive to said weight sensor assemblies.

37. (New) Apparatus as defined in claim 1 wherein said deflectable mounting structures support said frame on a track structure which guides movement of said frame.

38. (New) Apparatus as defined in claim 2 further comprising a deflectable seat cushion on said frame.

39. (New) Apparatus comprising:

a vehicle seat frame having a bottom portion and a back portion which together bear a vehicle occupant weight load;

a support structure which bears the entire weight of said frame and the entire magnitude of said occupant weight load, said support structure including a weight sensor apparatus which measures said entire magnitude of said occupant weight load; and

a vehicle occupant protection device responsive to said weight sensor apparatus,

said support structure including a pair of tracks which guide movement of said frame, said weight sensor apparatus comprising a plurality of weight sensor assemblies which measure portions of said occupant weight load acting on said tracks,

said weight sensor assemblies being operatively interposed between said frame and said tracks,

each of said weight sensor assemblies comprising a strain gauge mounted on a corresponding deflectable portion of said support structure.

40. (New) Apparatus as defined in claim 4 further comprising a deflectable seat cushion covering said bottom portion of said frame.

41. (New) A weight sensing apparatus for a vehicle seat comprising:
a plurality of sensors each including a mounting portion for attachment to a
vehicle seat structure and a deflectable portion that deflects in response to a weight
force applied to the vehicle seat structure to generate a weight signal; and

a controller for receiving said weight signals from said sensors to determine seat occupant weight.

- 42. (New) An apparatus as in claim 41 including at least one strain gage mounted to said deflectable portion of each of said sensors.
- 43. (New) An apparatus as in claim 42 wherein said at least one strain gage is a plurality of strain gages mounted in a predetermined spaced relationship to each other on said deflectable portion.

(New) An apparatus as in claim 41 wherein said seat structure is a seat pan.

45. (New) An apparatus as in claim 44 wherein each of said sensors includes a support portion mounted to a vehicle seat track member such that said deflectable portion is positioned between said mounting and support portions.

- 46. (New) An apparatus as in claim 44 wherein said seat pan is rectangular in shape defining four corners and said plurality of sensors is comprised of four sensors with one of said sensors mounted at each of said corners.
- 47. (New) An apparatus as in claim 41 including a safety restraint device controlled by said controller in response to seat occupant weight.
- 48. (New) An apparatus as in claim 47 wherein said safety restraint device is not deployed if seat occupant weight is below a predetermined weight.
- 49. (New) A method for determining seat occupant weight including the steps of:

mounting a plurality of sensors to a vehicle structure with each sensor including a deflectable portion that deflects in response to a weight force applied to the vehicle seat structure;

generating a weight signal from each of the sensors in response to the deflection; and

determining seat occupant weight from the signals.

- 50. (New) A method as in claim 49 further comprising the step of controlling a safety restraint device based on the seat occupant weight.
- 51. (New) A method as in claim 50 further comprising the step of preventing deployment of the safety restraint device if the seat occupant weight is below a predetermined weight.
- 52. (New) A method as in claim 49 further comprising the step of determining a center of gravity of the seat occupant from the signals.

- 53. (New) A method as in claim 52 further comprising the step of controlling a safety restraint device based on the seat occupant weight and center of gravity.
- 54. (New) A method as in claim 49 further comprising the step of mounting a strain gage to the deflectable portion of each sensor.
- 55. (New) A method as in claim 49 wherein the seat structure is a seat pan and the method further comprises the step of mounting the sensors between the seat pan and a seat track assembly.